## HYBRIDS.

- Q. alba L. × bicolor Willd. A natural tree growing in Franklin Park, Roxbury (J. G. Jack, 1895–1904).
- Q. alba L. × Prinus L. A non-fruiting tree grows in Concord on the estate of Wm. Brewster, in the edge of woods by a wet run. This tree Mr. A. Rehder tentatively pronounces to be the above hybrid, but fruit is needed for absolute determination.
- Q. ilicifolia Wang. × velutina Lam. Тор of Blue Hill (А. Rehder, September, 1900). See Rhodora iii. 137, 1901.

C. H. Knowlton \ Committee on Walter Deane \ Local Flora.

## THE ORIGINAL FLORA OF THE OLD COLONY.

## CLARENCE H. KNOWLTON.

Thoreau's frequent quotations in "Cape Cod," have led me to the book called "Mourt's Relation," a diary of early events in Plymouth colony, probably written by William Bradford and Edward Winslow. The floral notes seem to me more likely from Winslow's pen, for Bradford's own history scarcely mentions a plant, while Winslow on his trip to see Massasoit, and in a letter home to England, writes rather fully of what grew in the new country. The book is well worth reading, for about it still lingers "the charm of Sixteenth Century prose," and the events of the early years at Plymouth are exceedingly interesting. It was published in London in 1622, and there have been several reprints. It has seemed worth while to me to collate the notes on the flora of southeastern Massachusetts for the benefit of Rhodora readers.

"Upon the 9th of November following, by break of the day, we espied land, which we deemed to be Cape Cod, and so afterward it proved. And the appearance of it much comforted us, especially seeing so goodly a land and wooded to the brink of the sea.... And upon the 11th of November we came to an anchor in the bay [Province-

town harbor], which is a good harbour and pleasant bay, circled round, except in the entrance, which is about four miles over from land to land, compassed about to the very sea with oaks, pines, juniper, sassafras, and other sweet wood.... The same day, so soon as we could, we set ashore fifteen or sixteen men, well armed, with some to fetch wood, for we had none left, as also to see what the land was.... They found it to be a small neck of land [Long Point]; on this side where we lay, is the bay, and the further side the sea; the ground or earth sand hills, much like the downs in Holland, but much better; the crust of the earth, a spit's depth, excellent black earth; all wooded with oaks, pines, sassafras, juniper, birch, holly, vines, some ash, walnut; the wood for the most part open and without underwood, fit either to go or ride in. At night our people returned, but found not any person, nor habitation; and laded their boat with juniper, which smelled very sweet and strong, and of which we burnt the most part of the time we lay there."

On the 15th another party was set ashore and proceeded about ten miles. The next morning, in Truro, "we marched through boughs and bushes, and under hills and valleys, which tore our very armor in pieces.... About ten o'clock we came into a deep valley, full of brush, wood-gaile and long grass.... And as we went in another valley, we found a fine clear pond of fresh water, being about a musket shot broad, and twice as long. There grew also many small vines, and fowl and deer haunted there. There grew much sassafras.... We went on further and found new stubble, of which they had gotten corn this year, and many walnut trees full of nuts, and great store of strawberries, and some vines." Further on they came to some deserted Indian houses, in which they found "two or three baskets full of parched acorns... We found also a little silk grass, and a little tobacco seed, with some other seeds which we knew not. Without was sundry bundles of flags, and sedge, bulrushes, and other stuff to make mats."

There are no further botanical notes until Plymouth harbor was reached, on Dec. 16. "This harbour is a bay greater than Cape Cod, compassed with a goodly land; and in the bay two fine islands, uninhabited, wherein are nothing but woods, oaks, pines, walnuts, beech, sassafras, vines and other trees which we know not..... Monday, the 18th day, we made a land, manned with the master of the ship and three or four of the sailors. We marched along the coast

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in the woods some seven or eight miles.... The land for the crust of the earth is a spit's depth, excellent black mould, and fat in some places; two or three great oaks, but not very thick, pines, walnuts, beech, ash, birch, hazel, holly, asp, sassafras in abundance, and vines everywhere, cherry trees, plum trees, and many others which we know not. Many kinds of herbs we found here in winter, as strawberry leaves innumerable, sorrel, yarrow, carvel, brooklime, liverwort, water-cresses, great store of leeks and onions, and an excellent strong kind of hemp."

A year later Edward Winslow, writing enthusiastically to a friend in England under date of Dec. 11, 1621, writes the following: "All the spring-time the earth sendeth forth naturally very good sallet herbs. Here are grapes, white and red, and very sweet and strong also; strawberries, gooseberries, raspas, etc.; plums of three sorts, white, black and red, being almost as good as a damson; abundance of roses, white, red and damask; single, but very sweet indeed."

In July, 1621, Edward Winslow and Stephen Hopkins set out to spend July 4th and 5th with their Indian friend, Massasoit, at Packanokick. They went through Namaschet [Middleboro] to the Taunton River, and down its shores. "As we passed along, we observed that there were few places by the river but had been inhabited; by reason whereof much ground was clear, save of weeds, which grew higher than our heads. There is much good timber, both oak, walnut tree, fir, beech, and exceeding great chestnut trees."

Other passages later on refer to "ground-nuts" as a source of foodsupply for the Indians, and in times of shortage, for the colonists themselves.

I shall let each reader supply for himself the modern names for these pre-Linnaean plants, but it is of interest here to read Thoreau's remarks in Cape Cod, and an article by S. B. Parish in Rhodora III, "The Vegetation of Plymouth Three Hundred Years Ago."

In Rhodora IV, 81, Mr. John Robinson has commented on some of these Plymouth plants. He also quotes from a correspondent who suggests that this list was copied from Francis Higginson [Higgeson] who published a similar list of plants of New England.

This cannot be so, however, for Mourt's Relation was written from day to day as the events took place, and was printed in its present form in 1622 several years before Higginson left England for this country. It is a pleasure to clear these old worthies of the alleged

plagiarism. There is no reason to suppose that the two lists were not prepared independently, and the Plymouth list must have been.

HINGHAM, MASSACHUSETTS.

The narrow-leaved Variety of Salix pyrifolia.— In one of his discussions of Salix balsamifera Barratt, the late M. S. Bebb set off some leaf-extremes as varieties (Bull. Torr. Bot. Cl. xv. 124). With the exception of one, his var. lanceolata, they have not seemed to the writer worthy separate designation; but the var. lanceolata is found in some of the swamps of eastern Newfoundland to be so uniform and to occur in such extensive areas that it seems well worth recognition. But, unfortunately, the highly appropriate and longused name, S. balsamifera Barratt, was published as a specific name merely in synonymy and was not validated as a specific name until 1879, when Bebb brought it forward (Bot. Gaz. iv. 190). In the meantime S. pyrifolia Andersson was properly published (Vet. Acad. Handl. Stockh. vi. no. 1, 162) in 1867 and as the first valid specific name must stand. The narrow-leaved shrub should, therefore, be called

Salix pyrifolia Anderss., var. lanceolata (Bebb) n. comb. S. balsamifera, var. lanceolata Bebb, Bull. Torr. Bot. Cl. xv. t. 81, fig. 7 (1888).— M. L. Fernald, Gray Herbarium.

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